

REMARKS

The following is intended as a full and complete response to the Final Office Action dated June 9, 2009, having a shortened statutory period for response set to expire on September 9, 2009. The Examiner rejected claims 1, 6, 8, 10, 12, and 15-21 under 35 U.S.C. §103(a) as being unpatentable over Subramanian (U.S. 2002/0015401) in view of Wolrich (U.S. 6,694,380). The Examiner rejected claim 5 under 35 U.S.C. §103(a) as being unpatentable over Subramanian and Wolrich in further view of Shukla (U.S. 2002/0042875). The Examiner rejected claim 7 under 35 U.S.C. §103(a) as being unpatentable over Subramanian and Wolrich in further view of Warren (U.S. 6,675,284). The Examiner rejected claim 9 under 35 U.S.C. §103(a) as being unpatentable over Subramanian and Wolrich in further view of Kean (U.S. 5,469,003). The Examiner rejected claim 11 under 35 U.S.C. §103(a) as being unpatentable over Subramanian and Wolrich in further view of Pham (U.S. 2003/0074473). The Examiner rejected claims 13-14 under 35 U.S.C. §103(a) as being unpatentable over Subramanian and Wolrich in further view of Schunk (U.S. 6,980,515). The rejections are respectfully traversed.

Rejections under §103(a)

Claim 1 is amended to recite the limitations claim 14 and intervening claims 12 and 13. Claims 12-14 are also cancelled. The amendments to the claims do not raise any new issues. Therefore, Applicants respectfully request entry of the amendments and prosecution on the merits.

Amended claim 1 recites the limitations of a physical link adapter coupled to a reconfigurable I/O controller, where the physical link adapter is coupled to coupling circuitry and includes a reconfigurable finite-state machine configured to control the coupling circuitry to selectively connect a signal from a physical connector. Support for these limitations can be found at, among other places, Figures 54-55 of the present application and the supporting description. The cited references fail to teach or suggest these limitations.

The Examiner admits, at page 7 of the Final Office Action, that Wolrich and Subramanian do not disclose these limitations previously recited in claim 14 and now

recited in amended claim 1. Instead, the Examiner relies on Schunk. However, Schunk also fails to disclose these limitations.

Schunk discloses a failure recovery technique where “automatic protection switching (APS) hardware and software mechanisms allow automatic recovery from both equipment faults and external link failures ... [f]or example, each port on the primary rate interface (PRI) PM 12b (FIG. 1) has two connectors, a Port ‘A’ 13 connector and a Port ‘B’ 15 connector ... [i]f an internal fault is detected on Port ‘A’ 13, the system’s APS mechanism automatically redirects WAN traffic through the Port ‘B’ 15 connector” (Schunk at col. 8, lines 8-16). For example, as shown in Figure 22 of Schunk, “[t]he same data [that is] received by the primary WAN link 502 is also preferably received by the secondary WAN link 504 ... [i]f software detects errors on the primary WAN link 502, such as transmission errors, the APS software shifts the reading from the primary WAN link to the backup link 504” (Schunk at col. 22, lines 6-11). Schunk has multiple shortcomings relative to amended claim 1.

First, Schunk fails to teach or suggest the limitations of the physical link adapter including a reconfigurable finite-state machine configured to control the coupling circuitry to selectively connect a signal from a physical connector, as expressly recited in claim 1. Schunk is completely silent regarding the teaching that a finite state machine is used to control data transmission. Nothing is Schunk discloses that the “APS mechanism” includes, or otherwise involves, a finite state machine configured to control the coupling circuitry, as claimed.

Second, Schunk fails to teach or suggest the limitations of selectively connecting a signal from a physical connector, as recited in claim 1. As quoted in the excerpt above from Schunk, “[t]he same data received by the primary WAN link 502 is also preferably received by the secondary WAN link 504” (Schunk at col. 22, lines 6-8). According to these teachings of Schunk, data is simultaneously received from both the primary WAN link 502 and the secondary WAN link 504 unless an error is encountered. Thus, there is no “selectivity” in the data transmission of Schunk. For these reasons, Schunk fails to teach or suggest the limitations of selectively connecting a signal from a physical connector, as recited in claim 1.

As the foregoing illustrates, the combination of Subramanian, Wolrich, and Schunk fails to teach or suggest each and every limitation of claim 1. Shukla, Warren, Kean, and Pham fail to cure the deficiencies of Subramanian, Wolrich, and Schunk. Therefore, no combination of the references can render claim 1 obvious. For these reasons, Applicants submit that claim 1 is allowable. The remaining claims depend from allowable claim 1 and therefore are also allowable.

CONCLUSION

Based on the above remarks, Applicants believe that they have overcome all of the objections and rejections set forth in the Final Office Action mailed June 9, 2009 and that the pending claims are in condition for allowance. If the Examiner has any questions, please contact the Applicant's undersigned representative at the number provided below.

Respectfully submitted,



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